Remote Access Service (RAS) and Dial-up Networking Requirements

The original KETS Master Plan for Education Technology defined and established the requirement that all districts provide Teachers and Administrators the capability to dial-in to the KETS network.

A large number of districts have already addressed and implemented a dial-up solution within their districts. And of those districts, the majority selected a chassis/modem type solution to meet this requirement. Today, VPN based solutions have gained popularity to the extent that few vendors continue to offer this type of equipment combination. And to further complicate this matter, districts with chassis/modem combos will have little or no technical support available or enhancement capability.

More recently, districts that are in the process of completing Phase 1 of KETS (and have not adequately addressed the dial-up line item requirements up to this point) are asking for guidance on what options are available and eligible for EDTECH expenditures. The purpose of this Standard is to define the requirement for dial-up networking expectations in the KETS environment and identify the implementation options available to you.

KETS Requirement:

All Teachers and Administrators must be provided the opportunity to have dial-up access to the KETS network. The original Master Plan for Education Technology identified both a school and district level implementation requirement. During last year's Reconciliation of Phase 1, Implementation of KETS, districts were given the option to implement a district level only solution that would satisfy the KETS functionality requirement. Given the current industry trend toward migration to Virtual Private Network (VPN) based solutions, there are few vendors that continue to provide chassis/modem equipment combinations (and one could expect those offerings to go "end of life" in the near future as well). As a result, we have determined that this requirement may be satisfied with a PCI based, multi-port modem card and RAS (Remote Access Server) implementation. The minimum acceptable solution calls for at least 8 dial-up capable ports and an appropriate number of active telephone lines to ensure equitable "shared" access to the KETS network. Districts that already have a chassis/modem type solution in place are not expected to replace this equipment so long as the minimum functionality requirements have been met, and the district is able to continue to provide this service to the intended customer base.

Technical Considerations:

Solution must be supported by current KETS network operating systems.
Must have minimum of 8 ports capacity.
Multi-modem cards, if used, must be PCI based and upgradeable to V.90 specifications.
Multi-modem cards may be installed in a workstation class machine that is capable of running current network operating systems (NOS).

RAS will not be installed on the Bridgehead server. For optimum results RAS should be installed on a stand-alone or non-dedicated critical application server.
Appropriate level of NOS security measures must be implemented to prevent unauthorized access to the KETS network.

Local District Considerations:

Local district policies and procedures concerning dial-up access should be developed and referenced in the district's approved Acceptable Use Policy (AUP). Districts should also analyze (by survey or other means) the specific needs of their user base in an effort to appropriately address dial-in capacity requirements.

Purchasing/Installation Options:

Please contact your KETS Regional Engineer for information concerning the procurement options available and appropriate purchase request form.